PROJECT NUMBER:

1620

PROJECT TITLE:

Electrophysiological Studies

PROJECT LEADER: WRITTEN BY:

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PERIOD COVERED:

July, 1987

NASAL EVENT-RELATED POTENTIALS (NERPs)

OVERALL OBJECTIVE: To develop methods by which to objectively and reliably evaluate human responses to cigarettes, smoke constituents and tobacco flavorants.

I. CONCENTRATION RESPONSE STUDY

- A. <u>Objective</u>: To further differentiate among olfactory, trigeminal and mixed stimuli by investigating the relationships among nasal event-related potential (NERP) measures, stimulus concentrations and subjective estimates of odor intensity.
- B. Results: Repeated measures analyses of variance have been completed for all compounds. Factors analyzed included main effects for concentration, hemisphere and electrode position as well as concentration x hemisphere, concentration x electrode position and concentration x hemisphere x electrode position interaction effects.

 Post hoc analyses (Duncan's Multiple Range Tests) are currently in progress on those factors yielding overall statistical significance in order to more closely examine the sources of the differences.
- C. <u>Plans</u>: Complete multiple comparisons and write Annual Report by the end of August.